

# The Idaho Drinking Water Bulletin

Department of Environmental Quality Idaho Drinking Water Program

2002, Number 24

*There is more to it than collecting samples*

## Operating a public drinking water system

*A note to public drinking water systems . . .*

**H**aving a trained and certified operator at the control of your water system enhances public health protection. The Department of Environmental Quality (DEQ) and others have worked actively during the last two years to increase the number of operator training courses offered, to make them available in more locations around the state, and to increase the frequency and location of exams.

We hope that all of our efforts will result in better qualified operators and safer drinking water for all citizens of Idaho.

Lance Neilsen  
State Drinking Water  
Program Manager

Nancy Bowser  
Operator Certification  
& Training Coordinator

**S**o, you operate a water system. What does operating your system involve or what would you hire someone else to do, if you were considering contracting with a certified operator to operate your system? There is a lot more to operating a water system than just collecting water samples.

Whether you operate your own system or plan to hire a certified operator, or whether your water system serves 40, 4,000 or 400,000, plant operation includes three basic components:

**#1 Rule Requirements.** Know what the Idaho Rules for Public Drinking Water Systems and other agency rules, as well as local ordinances and laws require for your specific system.

**#2 System Mechanics.** Identify and know the components and the equipment that make up your specific water system.

**#3 System Maintenance.** Develop standard operating practices for performing routine and preventative maintenance and repairs. These practices will ensure the continued operation of your system's equipment.

### #1 Rule Requirements

Compliance with the Idaho Rules for Public Drinking Water Systems includes the following:

- ☐ collecting samples,
- ☐ providing notice to users if water contamination occurs,
- ☐ protecting your system's source of water,
- ☐ preventing cross connections within the domestic system,
- ☐ preventing cross connections between domestic and irrigation use,
- ☐ submitting reports such as annual Consumer Confidence Reports,
- ☐ providing public notification to consumers when public health may be threatened,
- ☐ demonstrating competent technical, financial, and management abilities, such as keeping records, setting rates, etc., and
- ☐ making operational changes as necessary to meet new state requirements.

Keep in mind that the operation, maintenance, or repair of some features of your water system may require you to meet a variety of state laws, various state agency rules, as well as local ordinances. For example, you might have to meet the electrical code for electrical repairs or upgrades, the plumbing code for expansions or repairs to the distribution system, or the health and safety codes for your chlorination system.

Other regular operating activities that must be conducted according to the appropriate rules include annual testing of backflow prevention devices, calibrating test equipment at water meters, getting permits to drill new wells, and obtaining zoning approval for a new well lot.

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**Remember the April 15, 2002 DEADLINE . . .** for every community water system and nontransient noncommunity water systems to have a certified responsible-in-charge operator and certified shift (backup) operator.

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The actions mentioned above do not form a complete list, but they provide examples of the variety of operational activities required by law.

## #2 System Mechanics

Know your system by identifying system equipment and how the distribution system functions. Identifying the water treatment equipment and mechanisms may be something as simple as listing a well casing, submersible pump, an electrical panel, or pressure and storage tanks. The list for your particular system may be longer and more complicated.

Being familiar with your distribution system includes knowing problem areas that have historically needed maintenance on a frequent basis. Obtaining a map or plan of the distribution system and keeping it up-to-date can be beneficial for future use. Use your system's map to identify dead ends, to show the location of repaired leaks and backflow prevention devices, etc.

## #3 System Maintenance

Establishing a routine maintenance schedule is the best way to ensure that the operation of your water system continues uninterrupted. Your system's technical, financial, and management skills play an important in setting up routine maintenance.

Many water systems manage their system by reacting to problems rather practicing routine or preventive maintenance. Routine maintenance is vital if a system is to provide the uninterrupted delivery of safe drinking water to the consumer. Examples of items that could appear on a routine or preventive maintenance list:

- ❑ **Keep a spare pump on hand.** Shop around and find an economical rebuilt pump to have as a spare pump. Waiting until an emergency occurs can mean having no choice but to buy a costly new pump, or having to pay extra shipping and handling fees to get it as soon as possible.
- ❑ **Conduct routine equipment maintenance.** Check the manufacturer's recommendations for routine maintenance on individual pieces of equipment and incorporate these into your regular maintenance schedule. Remember, however, it is only a recommendation not a rule requirement to have a comprehensive routine or preventive maintenance schedule.
- ❑ **Check your power bill.** Compare each power bill with previous power bills. Is the current bill unusually high? If so, are you actually using more water, or is there a system leak, or is the pump beginning to wear?

In summary, a certified operator does more than just collect a sample or pay a power bill. A certified operator is responsible for the complete operation and maintenance of a water system, which will include a variety of tasks and activities. Maintaining a water system is a major responsibility requiring time, various skills, and close attention to details. ■

## Don't Miss Out!

**Last Exam** Before Certification Deadline:  
**March 27, 2002**

**Deadline** to Apply for March 27, 2002 Exam:  
**January 25, 2002**

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1410 North Hillton  
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ENVIRONMENTAL QUALITY



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# We want to hire a certified operator - what do we do?

If you decide to contract the operation of your water system to a certified operator, what do the state rules require the water system owner and the contracted operator to do? *Section 559 of the Idaho Rules for Public Drinking Water Systems provides some answers.*

“Water systems . . . may contract with a certified public drinking water operator or a drinking water system having certified operators to provide supervision. The contracted public drinking water system operator or contracted entity shall be certified at the grade equal to or greater than the classification of the plant or system.

**01. Supervision.** For supervision required in this rule to be sufficient, the contracted certified water system operator or contracted entity shall:

- a. Be available on twenty-four (24) hour call and able to respond onsite upon request.
- b. Report the results of analyses or measurements that indicate maximum contaminant levels have been exceeded or that minimum treatment levels are not maintained and report the results of these analyses to the operator, owner, purveyor or supplier of water.
- c. Recommend corrective action when the results of analyses or measurements indicate maximum contaminant levels have been exceeded or minimum treatment levels are not maintained.
- d. Recommend that all elements of routine operation and maintenance of the water system are completed in accordance with accepted public health practice and the rules.”

According to Section 559, the individual you contract with will be placed in a position of authority by the water system so the operator can carry out the supervision of the many duties listed above.

The terms of your contract must outline the supervision duties given to the contracted individual or company, state the specific duties you want performed, and identify situations when the contractor must get prior permission from the water system owner for a situation not covered in the contract.

So, if you decide to contract the operation of your water system to a certified operator, remember to think through the numerous tasks involved in operation and maintenance. You may want to refer back to the above article, "Operating a water system: There is more to it than collecting samples," for hints on other issues you may need to include in your contract. ■

# What happens . . .

## if a system does not have a certified responsible-in-charge and certified shift (backup) operator?

Many individuals have asked, "What will happen to us if we don't have a certified responsible-in-charge and a certified shift (back-up) operator in place by April 15, 2002?"

The rule requires both a responsible-in-charge and a shift (backup) operator according to Section 554 of the Idaho Rules for Public Drinking Water Systems. Any community water systems (CWS) or non-transient non-community water systems (NTNCWS) that does not meet the rule requirements for certified operators by April 15, 2002, is risking enforcement actions that could be costly in time and money.

The enforcement authority for all sections of the Idaho Rules for Public Drinking Water Systems allow civil, criminal, and administrative recourse for noncompliance. Administrative and civil actions are frequently used enforcement actions, which may include system disapproval, penalties, injunctions, expenses, and attorney fees or other enforcement remedies deemed appropriate on a case-by-case basis by the DEQ or district court.

DEQ is responsible for ensuring compliance with the law for the protection of public health. DEQ policy is to achieve compliance by informing and working with water systems and by using enforcement and penalties as a last resort only when other attempts to bring about compliance fail. ■

## Still need to be certified?

Applications are available from the Idaho Water/Wastewater Certification Board Office, call (208) 746-3479. Or contact Brown Environmental at 1-800-543-4358 or (208) 465-5725; web site address: <http://www.idahocertificationtraining.com>.

*If you have questions, comments, or concerns about operator certification*, please contact Nancy Bowser, Senior Water Quality Analyst, at (208) 373-0406 or at [nbowser@deq.state.id.us](mailto:nbowser@deq.state.id.us). You may also contact your local DEQ Regional Office or District Health Department drinking water coordinator.

*Newsletter contributor: Nancy Bowser*

## Getting Certified:

**April 15, 2002 – DEADLINE** for every community water systems (CW) and non transient noncommunity water systems (NTNCWS) to have a certified responsible in-charge operator and certified shift (backup) operator.

**January 15, 2002** – Application Deadline: March 27, 2002 Exam

**March 2, 2002** – Last Certification Exam before April 15 deadline

**April 15, 2002** – Grandparent Certification Option Sunsets;  
Last Day To Apply for Grandparent Certificate

## Keeping a Valid Certification:

**March 1 to March 1** – Annual Certification & Continuing Education  
Accrual Year

**March 1** – Annual Certification Renewal **DEADLINE**

## TRAINING SCHEDULE

Class/Sponsor	Location	Date
<b>Rules &amp; Regulations Sampling &amp; Reporting Cross-Connections Emergency Response Planning Sanitary Survey Awareness ▲</b>	Caldwell	Jan 22-24, 2002
<b>Laboratory ★</b>	Lewiston	Jan 24, 2002
<b>Application Deadline for March Certification Exam</b>	NA	Jan 25, 2002
<b>Small System Operation and Maintenance ★</b>	Buhl	Jan 29, 2002
<b>Rules &amp; Regulations Sampling &amp; Reporting Cross-Connections Emergency Response Planning Sanitary Survey Awareness ▲</b>	Idaho Falls	Jan 29-30, 2002
<b>Drinking Water Distribution Systems ★</b>	Nampa	Jan 30-31, 2002
<b>Mechanical Maintenance ★</b>	Meridian	Feb 5-6, 2002
<b>Small Water System Operation Basics ▲</b>	Lewiston	Feb 6-7, 2002
<b>Laboratory ★</b>	Nampa	Feb 12, 2002
<b>Small Water System Operation Basics ▲</b>	Pocatello	Feb 13-14, 2002
<b>Small System Operation and Maintenance ★</b>	Caldwell	Feb 26, 2002
<b>Small Water System Operation Basics ▲</b>	Twin Falls	Feb 27-28, 2002
<b>VSWS Certification Review ★</b>	Twin Falls	March 5, 2002
<b>Water III &amp; IV Certification Review ★</b>	Twin Falls	March 6-7, 2002
<b>VSWS Certification Review ★</b>	Soda Springs	March 12, 2002
<b>VSWS Certification Review ★</b>	Weiser	March 15, 2002
<b>Pumps &amp; Motors ★</b>	Pocatello	March 19-20, 2002
<b>VSWS Certification Review ★</b>	Sandpoint	March 21, 2002
<b>VSWS Certification Review ★</b>	Coeur d'Alene	March 23, 2002
<b>Small Water System Operation Basics ▲</b>	Caldwell	March 25-26, 2002
<b>Operator Certification Exam ★</b>	NA	March 27, 2002

▲ Idaho Rural Water Association, 1-800-962-3257  
Online information: <http://www.idahoruralwater.com>

★ Brown and Caldwell, 1-800-543-4358 or for Boise area, 208-465-5725  
or register online: <http://www.idahocertificationtraining.com>

## Upcoming Financial Training

DEQ will present a series of workshops in February that will cover a variety of topics aimed at system owners, elected officials, and association board members. Topics to be presented at the six regional workshops include the *Business Planning Handbook* (now in production), DEQ's loan program, and operator certification and training requirements.

As you know, the Safe Drinking Water Act (SDWA) of 1996 puts new responsibilities on water system managers to demonstrate technical, financial, and management capacity. To help water systems provide safe drinking water and meet the complex requirements of the SDWA, the Boise State University Environmental Finance Center, under contract with DEQ, is developing a business planning handbook.

The planning handbook will adopt a user-friendly format covering the importance of good management, planning strategies for physical changes in the system, and finance techniques. The handbook will be made available for the first time during the February workshops. After the workshops, the Environmental Finance Center will produce a video that will be available for water system managers to review as a supplement to the handbook.

DEQ's loan program topics will include DEQ's sources of funding, setting the interest rate, preparation of the Priority List and Intended Use Plan, the loan process, and what's in store for the future?

The operator certification training will cover topics such as drinking water certification rules and requirements; grandparent certification and special features related to this certification; annual renewal and annual training requirements; training options for operators; and enforcement - what happens if a drinking water system does not have a certified operator?

### The workshop times, dates, and locations;

**Idaho Falls** February 5, 2002; 9 A.M.- 4 P.M. in the DEQ Building Conference Room at 900 North Skyline, Idaho Falls.

**Pocatello** February 6, 2002; 9 A. M.- 4P.M. in the DEQ Building Conference Room at 224 South Arthur, Pocatello.

**Twin Falls** February 7, 2002; 9 A.M.- 4 P.M. in the District Health Office Building Conference Room at 1020 Washington Street N on the College of Southern Idaho Campus in Twin Falls.

**Boise** February 14, 2002; 8:30 A.M.- 3:30 P.M. in the Bureau of Reclamation Building Conference Room 219 at 1150 North Curtis, Boise.

**Coeur d'Alene** February 20, 2002; 9 A.M.- 4P.M. in the North Idaho Center for Higher Education at 408 West Haycraft in Coeur d'Alene.

**Lewiston** February 21, 2002; 9 A.M.- 4 P. M. in the Clearwater River Room at the Lewis-Clark State College Williams Conference Center in Lewiston.

**For more information, please call Joan Thomas at the State DEQ Office in Boise at 208-373 0409. Please bring photo ID.**